1. **Inclusion Criteria**

**NO YES**

1. Patients with shock
2. Patient is sedated and mechanically ventilated
3. Patient with fluid overload with or without AKI
4. absence of fluid responsiveness (PLR test negative, < 10 % increase in CI)
5. negative Furosemide stress test (>200ml/120 min after 1mg/kg furosemide)
6. Written informed consent.
7. Patient must be 18 years old or older.
8. Treating ICU doctor expects patient to require treatment in an ICU beyond the 2 next calendar days
9. BIA-data with fluid overload defined as 5 % increase in VE over baseline body weight
10. **Exclusion Criteria**

**NO YES**

1. Patients with lactate > 4mmol or rising lactate over last 6 hours
2. Patients with hypotension (MAP <50mmHg) resistant to vasopressors
3. Patients with vasopressor dose > 0.3 µg/kg/min
4. Patients with more than one vasopressor in use
5. Patients with hypernatremia > 155 mmol/L. (= exclusion to be randomized in HSS group)
6. Patients with Albumin level > 25g/L. (= exclusion to be randomized in albumin 20 % group)
7. Patients with body weight<40 kg (measured or estimated)
8. Patients with hyperchloremia > 115 mmol/l. (= exclusion to be randomized in HSS group)
9. Start of deresuscitation beyond day 5
10. Female patient is pregnant/breastfeeding.
11. Diabetic ketoacidosis or hyperosmolar hyperglycemic state
12. Non-traumatic subarachnoid hemorrhage
13. Cardiogenic shock
14. Suspected or proven active diabetes insipidus (administration of desmopressin within 24 hours)
15. Suspected or proven SIADH
16. Expected to die within 24 hours
17. Refusal of consent
18. Inability of personal consulted to understand written verbal information and for whom no interpreter is

available

1. **Date and Time of Informed Consent:**

\_\_ \_\_ \_\_/\_\_ \_\_/\_\_ \_\_ \_\_ \_\_ \_\_ \_\_ **:** \_\_ \_\_

mmm dd yyyy 24 hours

1. **Physical Assessment:**

Date: \_\_ \_\_ \_\_/\_\_ \_\_/\_\_ \_\_ \_\_ \_\_

mmm dd yyyy

Height: \_\_\_\_\_\_\_\_ cm

Weight: \_\_\_\_\_\_\_\_ kg

Heart Rate: \_\_\_\_\_\_\_\_ bpm

Blood Pressure: \_\_\_\_\_\_\_\_ / \_\_\_\_\_\_\_\_ mmHg

*Systolic* / *Diastolic*

1. **Infection Assessment at Hospital Admission:** No infection  
    Infection Verified  
    Infection Suspected
2. **Infection Assessment at ICU Admission:** No infection  
    Infection Verified  
    Infection Suspected
3. **Date and Time of Study randomisation:**

\_\_ \_\_ \_\_/\_\_ \_\_/\_\_ \_\_ \_\_ \_\_ \_\_ \_\_ **:** \_\_ \_\_

mmm dd yyyy 24 hour

1. **Study Group:**  1  2  3
2. **Age:** \_\_ \_\_ \_\_ years

1. **Gender:**  Male  Female

**Clarification Randomisation:**

**Group 1** CVVH and albumin 20 % (200ml bolus followed by 3x 200ml during first day and later on titrated towards serum albumin levels of 30 g/L)

**Group 2** CVVH and 6g HSS

**Group 3** CVVH 12g HSS**History of Cardiac Risk Factors:**

None

Unknown

Systemic Hypertension

Pulmonary Hypertension

Hypercholesterolemia

Diabetes

Obesity

Current Smoker

Prior Smoker, Quit more than 6 Months Ago

1. **History of Cardiac Disease:**

None

Unknown

Angina

Congestive Heart Failure

Coronary Artery Disease

Myocardial Infarction

Cardiomyopathy

Valvular Heart Disease

Endocarditis

Other (Specify):\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. **History of Respiratory Disease:**

None

Unknown

Emphysema

COPD

Asthma

Lung Cancer

Other (Specify):\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. **History of Renal Disease:**

None

Unknown

Renal Failure

Hemodialysis

Other (Specify):\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. **History of Vascular Disease:**

None

Unknown

Peripheral Vascular Disease (Arterial)

Transient Ischemic Attack

Stroke, Date \_\_\_\_\_ / \_\_\_\_ / \_\_\_\_\_\_\_

mmm dd yyyyOther (Specify):\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. **History of Other Diseases:**

None

Unknown

Bleeding Disorder

Cancer (Specify):\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Gastrointestinal Disease

Liver Disease

Other (Specify):\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. **Surgical Interventions: (Prior to this admission)**

None

Unknown

Cardiac Surgery (detail below)

Type: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Date: \_\_\_\_\_ / \_\_\_\_ / \_\_\_\_\_\_\_

mmm dd yyyy

Carotid Surgery (detail below)

Type: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Date: \_\_\_\_\_ / \_\_\_\_ / \_\_\_\_\_\_\_

mmm dd yyyy

Other Surgery (detail below)

Type: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Date: \_\_\_\_\_ / \_\_\_\_ / \_\_\_\_\_\_\_

mmm dd yyyy

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| My signature indicates that to the best of my knowledge all information entered on Form 1 is correct. | | | Date |
|  |  |  | |
|  |  | **\_\_ \_\_ \_\_/\_\_ \_\_/\_\_ \_\_ \_\_ \_\_** | |
| *Investigator’s Signature* |  | mmm dd yyyy | |